

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P188301

Luminaire Tested: **22SR-LD2-20-C-UNV-L840-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188301
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24792)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22SR-LD2-20-C-UNV-L840-CD1-MR-U
Description: METALUX 2X2 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1193.0 lumens
Efficiency: N/A
Efficacy: 77.5 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 2.21 / 2.01
Luminous Opening: Rectangular (W 1.92' x L: 1.92' x H: 0')
CIE Type: Direct

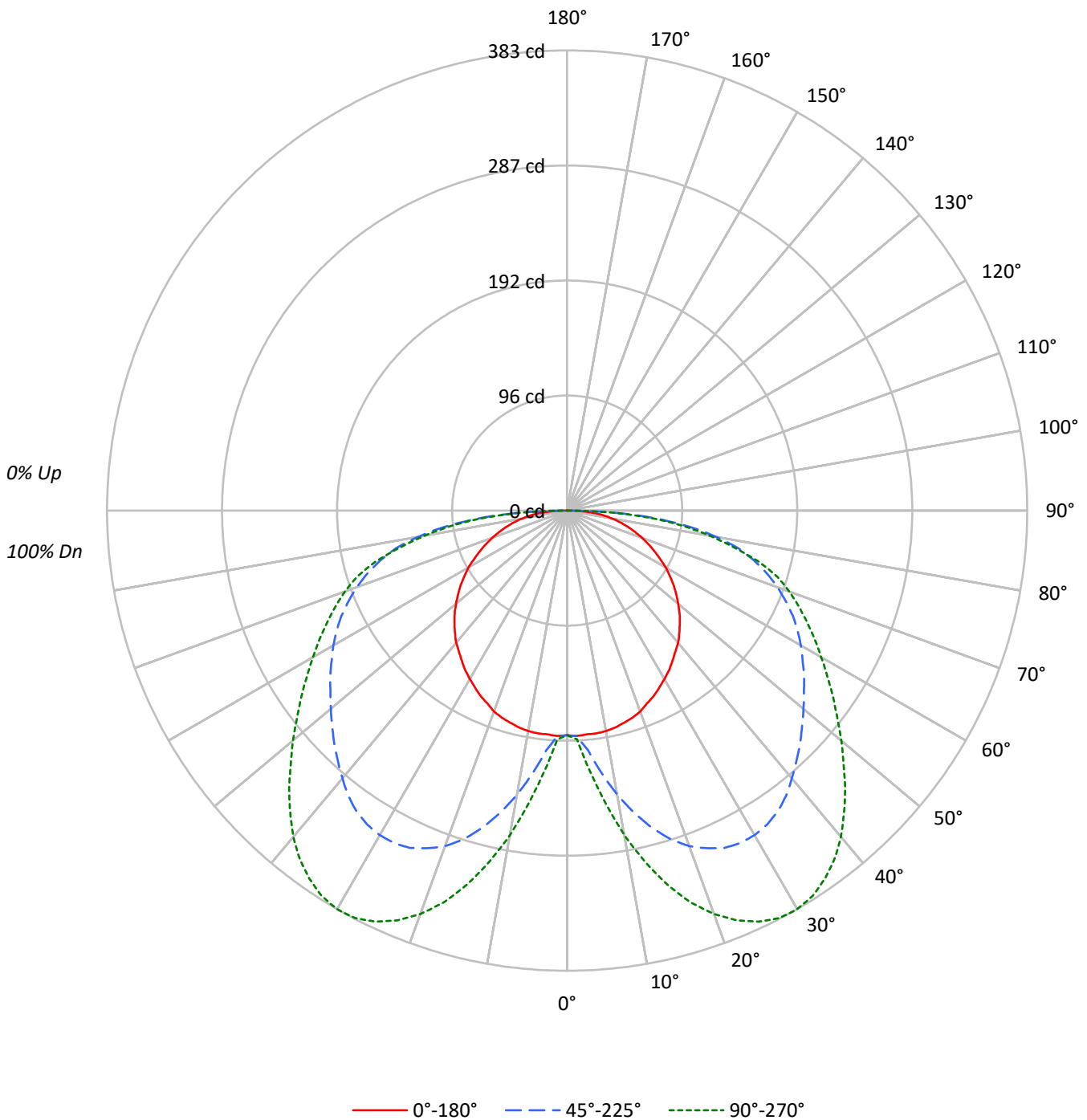
Input Watts (W): 15.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	106	100	95	90	103	98	93	89	93	89	86		89	86	83		86	83	80	78
2	95	85	77	70	92	83	76	69	79	73	68		76	71	66		73	68	65	62
3	86	73	64	57	83	72	63	56	69	61	55		66	59	54		63	58	53	50
4	78	64	54	47	75	63	53	46	60	52	46		58	51	45		55	49	44	42
5	71	57	47	39	69	55	46	39	53	45	39		51	44	38		49	43	38	35
6	65	50	41	34	63	49	40	33	48	39	33		46	38	33		44	38	32	30
7	60	45	36	29	58	45	36	29	43	35	29		41	34	29		40	33	28	26
8	56	41	32	26	54	40	32	26	39	31	25		38	30	25		36	30	25	23
9	52	38	29	23	50	37	28	23	36	28	23		35	27	22		33	27	22	20
10	49	34	26	20	47	34	26	20	33	25	20		32	25	20		31	25	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	548	548	548
5°	550	589	640
10°	554	714	816
15°	555	830	978
20°	555	927	1114
25°	551	1002	1220
30°	548	1055	1296
35°	547	1093	1338
40°	550	1113	1356
45°	549	1136	1356
50°	550	1171	1358
55°	553	1230	1379
60°	556	1317	1431
65°	556	1437	1529
70°	568	1596	1686
75°	592	1825	1872
80°	636	2131	2037
85°	726	2464	2323



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.3	1.7
10°-20°	74.9	6.3
20°-30°	135.6	11.4
30°-40°	180.2	15.1
40°-50°	198.1	16.6
50°-60°	196.4	16.5
60°-70°	180.8	15.2
70°-80°	144.4	12.1
80°-90°	62.3	5.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	230.8	19.3
0°-40°	411.0	34.4
0°-60°	805.5	67.5
0°-90°	1193.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1193.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	187	187	187	187	187	
5°	187	188	200	214	218	18
15°	183	219	274	309	322	52
25°	170	235	310	359	378	78
35°	153	227	306	357	374	96
45°	133	206	274	314	327	102
55°	108	180	241	265	270	97
65°	80	152	207	217	220	80
75°	52	116	161	164	165	55
85°	22	53	73	69	69	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	187.0	187.0	187.0	187.0	187.0	187.0	187.0	187.0	187.0	187.0	187.0
2.5°	187.7	187.7	187.7	187.7	187.0	187.0	187.0	187.0	187.0	187.7	188.4
5°	187.0	187.0	187.0	187.7	187.7	189.1	191.2	194.0	196.8	200.3	204.5
7.5°	187.0	187.0	187.0	187.7	191.2	196.8	203.1	209.3	214.9	220.5	226.8
10°	186.3	186.3	186.3	190.5	198.2	207.2	216.3	224.7	232.4	240.0	247.7
12.5°	184.9	184.9	187.0	194.7	205.8	217.7	227.5	238.6	248.4	257.5	266.6
15°	182.8	182.8	187.0	198.9	212.8	225.4	238.6	251.2	263.1	273.5	284.0
17.5°	180.7	180.7	187.7	202.4	217.7	233.1	247.7	261.7	274.9	286.8	298.0
20°	177.9	177.9	187.7	205.1	221.9	238.6	254.7	269.3	284.0	297.3	309.1
22.5°	173.7	175.1	187.7	206.5	224.7	242.1	258.9	275.6	291.0	304.2	317.5
25°	170.3	172.4	187.0	206.5	225.4	244.2	262.4	279.1	295.2	309.8	323.1
27.5°	166.1	168.9	185.6	205.8	225.4	244.2	263.1	280.5	297.3	311.9	325.9
30°	161.9	165.4	183.5	203.8	224.0	243.5	261.7	279.8	296.6	311.9	325.9
32.5°	157.7	161.9	180.0	201.0	221.2	240.7	259.6	277.7	294.5	309.8	323.8
35°	152.8	157.7	176.5	197.5	217.7	237.2	255.4	273.5	290.3	305.6	318.9
37.5°	147.9	153.5	172.4	193.3	212.8	232.4	250.5	267.9	284.7	299.3	312.6
40°	143.7	148.6	167.5	188.4	207.9	226.8	244.9	261.7	277.7	291.0	304.2
42.5°	138.2	144.4	162.6	183.5	202.4	220.5	238.6	254.7	270.0	282.6	295.2
45°	132.6	139.6	157.7	177.2	196.8	214.2	231.7	247.7	261.7	274.2	285.4
47.5°	127.0	134.0	152.1	171.7	190.5	207.9	224.7	240.0	253.3	265.2	276.3
50°	120.7	129.1	146.5	165.4	184.2	201.7	217.7	232.4	245.6	256.8	267.3
52.5°	114.4	123.5	141.0	159.8	177.2	194.7	210.7	224.7	237.2	248.4	257.5
55°	108.2	117.2	135.4	153.5	171.0	189.1	204.5	218.4	231.0	240.7	249.1
57.5°	101.2	111.6	129.1	147.2	164.7	181.4	197.5	211.4	222.6	232.4	240.0
60°	94.9	105.4	122.8	140.3	158.4	175.1	190.5	203.8	214.9	224.7	231.7
62.5°	87.2	99.1	115.8	134.0	151.4	167.5	183.5	196.8	207.9	216.3	221.9
65°	80.2	92.1	108.9	126.3	143.7	160.5	175.8	189.1	198.9	207.2	212.1
67.5°	73.3	85.1	101.9	119.3	136.1	152.1	167.5	180.0	189.8	196.8	201.0
70°	66.3	78.2	94.2	110.9	127.7	143.7	158.4	170.3	179.3	186.3	189.8
72.5°	59.3	71.2	86.5	102.6	118.6	134.0	148.6	159.8	168.2	174.4	177.9
75°	52.3	63.5	78.2	93.5	108.2	123.5	137.5	147.9	156.3	161.2	164.0
77.5°	45.4	55.8	69.1	83.0	97.7	111.6	124.2	134.7	141.6	146.5	147.9
80°	37.7	47.4	58.6	71.9	84.4	97.7	108.9	117.9	124.2	126.3	126.3
82.5°	30.7	37.7	46.8	57.9	68.4	79.5	89.3	97.0	100.5	102.6	101.9
85°	21.6	25.8	32.1	40.5	48.1	57.9	64.9	69.8	72.6	73.3	72.6
87.5°	11.2	11.9	15.4	19.5	23.7	30.0	32.8	37.0	38.4	38.4	38.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	187.0	187.0	187.0	187.0	187.0	187.0	187.0	187.0
2.5°	188.4	188.4	189.8	189.8	190.5	189.8	190.5	190.5
5°	207.2	210.0	212.8	214.2	216.3	217.0	217.7	217.7
7.5°	230.3	234.5	237.9	240.0	243.5	244.9	245.6	245.6
10°	252.6	258.2	263.1	266.6	270.0	272.1	273.5	274.2
12.5°	273.5	280.5	286.1	291.0	294.5	297.3	298.7	299.3
15°	291.7	300.0	307.0	311.9	316.8	319.6	321.7	322.4
17.5°	307.7	316.1	323.8	330.1	334.9	338.4	340.5	341.9
20°	319.6	329.4	337.7	344.0	350.3	353.8	355.9	357.3
22.5°	328.7	339.1	348.2	355.2	361.5	365.6	367.7	369.1
25°	334.9	346.1	355.9	362.8	369.8	374.0	376.8	377.5
27.5°	338.4	350.3	360.1	367.7	374.7	378.9	381.7	382.4
30°	339.1	350.3	360.8	368.4	375.4	379.6	382.4	383.1
32.5°	337.0	348.2	358.0	366.3	372.6	376.8	379.6	380.3
35°	332.1	343.3	352.4	360.8	367.0	371.2	374.0	374.0
37.5°	324.5	335.6	344.7	352.4	358.7	362.1	364.9	365.6
40°	316.1	325.9	334.9	341.9	347.5	351.0	353.8	354.5
42.5°	306.3	315.4	323.1	329.4	334.9	339.1	340.5	341.2
45°	295.9	304.2	311.2	316.8	321.7	323.8	326.6	327.3
47.5°	285.4	293.1	298.7	303.5	307.7	310.5	311.9	311.9
50°	274.9	281.2	286.8	291.0	293.8	295.2	296.6	298.0
52.5°	265.2	270.0	274.9	277.7	279.8	281.9	282.6	283.3
55°	255.4	260.3	263.8	265.9	267.3	269.3	269.3	270.0
57.5°	245.6	249.1	251.9	253.3	254.7	255.4	256.1	256.8
60°	235.9	238.6	240.0	241.4	242.1	243.5	243.5	244.2
62.5°	226.1	227.5	228.9	229.6	230.3	231.7	232.4	232.4
65°	214.9	216.3	217.0	217.7	218.4	219.8	220.5	220.5
67.5°	203.8	204.5	204.5	205.8	206.5	207.9	207.9	208.6
70°	191.9	191.9	192.6	193.3	194.0	194.7	196.1	196.8
72.5°	179.3	178.6	179.3	180.0	181.4	182.1	182.8	183.5
75°	164.0	164.0	164.7	164.0	164.0	164.7	164.7	165.4
77.5°	147.2	145.1	143.0	143.0	143.0	142.3	142.3	143.0
80°	124.9	122.1	120.7	120.7	120.0	120.0	120.7	120.7
82.5°	99.8	99.1	96.3	96.3	97.0	95.6	96.3	97.0
85°	71.2	70.5	69.1	69.1	69.1	67.7	68.4	69.1
87.5°	37.7	37.0	35.6	36.3	36.3	34.9	36.3	35.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)